

## WHAT IS CLAIMED IS:

1. A transparent mobile IPv6 agent comprising:

a monitoring system for performing system operations including installation, parameter settings, and activation of related functions for different operating systems; and

an application system having standard functions and standard data structures for internal processing, and having different interfaces for different operating systems, the interfaces of the application system comprising:

a socket service interface for generating a socket linking service in communication nodes of both entities through an IPv6 layer in processing mobile packets;

an IPv6 layer interface for transmitting or receiving mobile packets through the IPv6 layer;

a network access layer API for calling an API related service across different network access devices; and

an operating system kernel layer interface for calling services related to procedures and data structures of an operating system.

2. The transparent mobile IPv6 agent as claimed in claim 1, wherein the application system has same internal calling interfaces, and differences of different operating systems are packaged in external interfaces.

3. The transparent mobile IPv6 agent as claimed in claim 2, wherein a package of the application system comprises:

creating related application system header file;

creating related application system macro instruction file;  
creating related application system function file;  
creating related application system initialization/clearing method;  
and

5       creating related application system installation information file.

4. The transparent mobile IPv6 agent as claimed in claim 3,  
wherein each of the application system's header file 、 macro instruction  
file 、 function file 、 initialization/clearing method, and installation  
information file has a reference table regarding differences among  
10       various operating systems.

5. The transparent mobile IPv6 agent as claimed in claim 4,  
wherein the monitoring system packages the differences in external  
interfaces.

6. The transparent mobile IPv6 agent as claimed in claim 5,  
15       wherein a package of the monitoring system comprises:

creating related compiled files corresponding to compilation  
instructions of different systems;

creating related parameters/configuration setting file and file path of  
library corresponding to different system environments;

20       creating related system compilation, installation, and data file for  
activating related function; and

setting related control parameters.